STRUCTURAL SOLUTIONS, P.A.

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GARAGE DOOR EVALUATION REPORT

Garage Door No.:	**IBC-1314-150-15**	Amarr	2741	Report Date:	10/5/2023
Design Pressures:	**+31.5 psf, -35.9 psf**	Test Pressures:	**+47.3 psf, -53.9 psf**		Project No. 17-108
Test Date:	**12/21/2017**	Test Location:	Amarr, 165 Carriage Ct., Winston-Salem, NC		
ASCE 7-22 Criteria:	**Up to 5 Feet of Door Width in Zone 5; Roof Slope ≤ 10°; Enclosed Building**				
	Exp. B, 30' MRH	**Exp. C, 15' MRH**	**Exp. C, 25' MRH**	**Exp. D, 15' MRH**	**Exp. D, 25' MRH**
	194 mph	**176 mph**	**168 mph**	**160 mph**	**154 mph**

Reference Drawing and Test Report(s):

- Amarr Drawing number IBC-1314-150-15 dated 03/13/2018
- Structural Solutions, P.A. report for IBC-1314-150-15 dated 10/05/2023
  - Static Air Pressure Test witnessed by Thomas L. Shelmerdine, PE

Description of Test Specimen:

A 14'-2" wide x 8'-0" high x 1 3/8" thick sectional garage door, Amarr 2741. All sections were made of 27 ga exterior / 27 ga interior galvanized steel sheet. The test unit is further described on Drawing IBC-1314-150-15.

Test Standards and Report Conclusions:

The above referenced Test Report states the following:

- The tests were conducted in accordance with ANSI/DASMA 108-12; ASTM E330-14
- The tests were witnessed and certified by: Thomas L. Shelmerdine, PE
- All tests passed the referenced Test Standards.
- The Amarr test facility is accredited by the American Association for Laboratory Accreditation, Cert. #2595.01.

Summary:

The 14'-2"x8'-0" Amarr 2741 door as described on drawing IBC-1314-150-15 meets or exceeds the testing criteria as described above. By comparison to the construction of the 14'-2"x8'-0" Amarr 2741, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IBC-1314-150-15:

- 14'-2" x 8' Amarr 2742 doors (which are 2" thick in lieu of 1 3/8" thick)
- 14'-2" x 8' Amarr 2042 doors (which are 2" thick with 20ga exterior skin, in lieu of 1 3/8" thick with 27ga exterior skin)
- 14'-2" x 8' Amarr 2442 doors (which are 2" thick with 24ga exterior skin, in lieu of 1 3/8" thick with 27ga exterior skin)
- Amarr 2741, 2742, 2042 and 2442 doors with widths up to 14'-2" and heights up to 24'-0"
- Up to 4 windows may be installed in 1 section (3-1/4" x 21-3/8" x 0.080 insulated plexiglass, or 10-3/16" x 23-3/8" x 0.080 insulated plexiglass, or 9-5/8" x 21-5/8" x 1/8" DSB)
- Windows are not required to be installed in any section.

To the best of my knowledge, the above garage door conforms to the requirements of the Florida Building Code 8th Edition (2023). I certify that I have no financial interest in the testing lab(s) that performed the tests, nor in Amarr Garage Doors.

Submitted By:

Thomas L Shelmerdine

Digitally signed by Thomas L Shelmerdine
DN: c=US, o=North Carolina, dnQualifier=A01410D000001856487A7B100125CE2, cn=Thomas L Shelmerdine
Date: 2023.10.05 12:29:54 -04'00'

THOMAS L. SHELMERDINE
LICENSE
No. 48579
STATE OF FLORIDA
PROFESSIONAL ENGINEER
See Digital Signature

This document has been digitally signed & sealed by Thomas L. Shelmerdine, PE on the date shown. Printed copies of this document are not considered signed & sealed, and the signature must be verified on any electronic copies.

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STRUCTURAL SOLUTIONS, P.A.

Thomas L. Shelmerdine, PE (Florida PE #0048579) (dba Structural Solutions of North Carolina, Inc., Florida Firm #29412)

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